

## Allo-aca TFA

Cat. No.:	HY-P3212A
Molecular Formula:	C <sub>50</sub> H <sub>76</sub> F <sub>3</sub> N <sub>13</sub> O <sub>17</sub>
Molecular Weight:	1188.21
Sequence Shortening:	{H-allo}-TE-{Nva}-VALSR-{Aca}-NH <sub>2</sub>
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Allo-aca TFA, a leptin peptidomimetic, is a potent, specific leptin receptor antagonist peptide. Allo-aca TFA blocks leptin signaling and action in numerous in vitro and in vivo models <sup>[1][2]</sup> .
<b>In Vitro</b>	Allo-aca TFA inhibits leptin-induced proliferation of MDA-MB-231 cells at 50 pM concentration. Allo-aca TFA inhibits leptin-induced proliferation of MCF-7 cells with an IC <sub>50</sub> of 200 pM <sup>[1]</sup> . Allo-aca TFA at 250 nmol/L reduces VEGF-dependent leptin mRNA expression in both cell lines below base levels. Allo-aca TFA inhibits VEGF mitogenic effects. Allo-aca TFA inhibits VEGF-induced chemotaxis and chemokinesis in RF/6A retinal endothelial cells <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	In an MDA-MB-231 orthotopic mouse xenograft model, Allo-aca TFA administered subcutaneously significantly extends the average survival time from 15.4 days (untreated controls) to 24 and 28.1 days at 0.1 and 1mg/kg/day doses, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Otvos L Jr, et al. Efficacy of a leptin receptor antagonist peptide in a mouse model of triple-negative breast cancer. *Eur J Cancer*. 2011;47(10):1578-1584.

[2]. Coroniti R, et al. Designer Leptin Receptor Antagonist Allo-aca Inhibits VEGF Effects in Ophthalmic Neoangiogenesis Models [published correction appears in *Front Mol Biosci*. 2016 Nov 18;3:75]. *Front Mol Biosci*. 2016;3:67. Published 2016 Oct 13.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA